

In accordance with 37 C.F.R. 1.136(a), a three month extension of time is submitted herewith to extend the due date of the response to the Office Action dated August 28, 2002, for the above-identified patent application from November 28, 2002, through and including February 28, 2003. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of \$930.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 6 and 8-13 under 35 U.S.C. § 103(a) as being unpatentable over Blaettner et al. (U.S. Patent No. 5,113,104) in view of Yuji (JP Patent No. 62-018939) is respectfully traversed.

Blaettner et al. describe a generator (20) including a frame (22), a stator assembly (24) positioned within the frame, and an armature assembly (26) positioned with the stator assembly. The motor also includes a brush plate assembly (40) that facilitates isolating the frame from vibrations. The armature assembly includes a shaft (32) mounted to an endshield bearing (60) configured to the shaft.

Yuji describes a method for fastening a stator (7) of an electric motor to a casing (3) using a bolt (8) and a washer (9). The washer includes two metal outer layers (9a and 9c) and an electric insulator layer (9b) positioned between the outer layers. The outer layers facilitate shielding the insulator layer during installation. Additionally, the washer disrupts short circuits between the casing, the bolt, and the motor stator end face.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Blaettner et al. according to the teachings of Yuji. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, "it is impermissible . . . to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Although it is asserted within the Office Action that Blaettner et al. teach the present invention except for a washer comprising a first layer, a second layer, and a third layer, and that Yuji discloses a washer comprising a first layer, a second layer, and a third layer for the purpose of dampening vibrations induced from a rotor shaft, no motivation nor suggestion to combine the prior art disclosures has been shown. Since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 6 and 8-13 be withdrawn.

Furthermore, Applicants respectfully submit that no motivation for the combination can be found within the prior art itself, as the prior art teaches away from each other. Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration. However, Blaettner et al. do not describe nor suggest incorporating a multi-layer washer to

dampen vibrations induced when the rotor shaft contacts the bearing during rotation of the rotor shaft.

In contrast, Yuji describes electrically insulating a stator and a bolt of an electric motor using a multi-layer washer. More specifically, the washer is designed to break the short circuit between the casing, the bolt, and a motor stator end face. However, to the extent understood, the washer is not configured to dampen vibrations generated as a result of a rotor contacting a bearing assembly during motor operation. Moreover, Yuji does not appear to address issues related to isolating vibrations.

If art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. More specifically, because Applicants respectfully submit that Yuji teaches away from Blaettner et al., and as such, there is no suggestion or motivation to combine Blaettner et al. with Yuji.

Further, and to the extent understood, no combination of Blaettner et al. and Yuji, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 8-13 depend on Claim 6 which recites a motor comprising "a rotor assembly... a bearing... a washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers, said washer positioned on said rotor shaft and in contact with said bearing, said washer configured to dampen vibrations induced when said rotor shaft contacts said bearing during rotation of said rotor shaft."

No combination of Blaettner et al. and Yuji describes or suggests a motor including a rotor assembly and a bearing, in combination with a washer including a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft and in contact with the bearing, the washer configured to dampen vibrations induced when the rotor shaft contacts the bearing during

rotation of the rotor shaft. Rather, in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, and Yuji describes using a multi-layered washer to electrically insulate a bolt from the housing. For at least the reasons set forth above, Claim 6 is submitted to be patentable over Blaettner et al. in view of Yuji.

Claims 8-13 depend directly or indirectly, from independent Claim 6. When the recitations of Claims 8-13 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claims 8-13 are likewise patentable over Blaettner et al. in view of Yuji.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 6 and 8-13 be withdrawn.

The rejection of Claims 7 and 14-18 under 35 U.S.C. § 103(a) as being unpatentable over Blaettner et al. (U.S. Patent No. 5,113,104) in view of Yuji (JP Patent No. 62-018939) as applied to Claims 6 and 8-13 above, and further in view of Hoyer-Ellefsen (U.S. Patent No. 4,340,830) is respectfully traversed.

Blaettner et al. and Yuji are described above. Hoyer-Ellefsen describes a motor (10) including a housing (10), a stator assembly (33) disposed within the housing, and a rotor assembly (46) positioned within the stator assembly. The rotor assembly includes a rotor (48) coaxially mounted on a shaft (50) by bearings (58 and 60). The shaft is secured within the motor by a set of retaining members including a resilient wave washer (72), a flat washer (74), and a retaining locking washer (76). The wave washer is positioned against an outer most surface of bearing (60), and the flat washer is positioned against the wave washer by the retaining locking washer such that the rotor and the shaft rotate freely.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. Obviousness cannot be established by merely suggesting that it would have been an obvious to one of ordinary skill in the art to modify Blaettner et al. according to the teachings of Yuji, in light of the teachings of Hoyer-Ellefsen. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As

explained by the Federal Circuit, "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

Moreover, the Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, "it is impermissible . . . to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown. Accordingly, since there is no teaching nor suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 7 and 14-18 be withdrawn.

Furthermore, Applicants respectfully submit that the prior art teaches away from each other. Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, and in contrast, Hoyer-Ellefsen describes using a retaining locking washer to secure a rotor assembly. Specifically, neither Blaettner et al. nor Hoyer-Ellefsen describe nor suggest incorporating a multi-layer washer to dampen vibrations induced when the rotor shaft contacts the bearing during rotation of the rotor shaft.

In contrast, Yuji describes electrically insulating a stator and a bolt of an electric motor using a multi-layered washer. More specifically, the washer is designed to break the short circuit between the casing, the bolt, and a motor stator end face. However, to the extent understood, the washer is not designed to dampen vibrations, nor secure a rotor assembly. Moreover, Yuji does not appear to address issues related to isolating vibrations.

If art "teaches away" from a claimed invention, such a teaching supports the nonobviousness of the invention. U.S. v. Adams, 148 USPQ 479 (1966); Gillette Co. v. S.C. Johnson & Son, Inc., 16 USPQ2d 1923, 1927 (Fed. Cir. 1990). In light of this standard, it is respectfully submitted that the cited art, as a whole, is not suggestive of the presently claimed invention. More specifically, because Applicants respectfully submit that Yuji teaches away from Blaettner et al. and Hoyer-Ellefsen, and as such, there is no suggestion or motivation to combine Blaettner et al. with Yuji.

Further, and to the extent understood, no combination of Blaettner et al., Yuji, nor Hoyer-Ellefsen, describes or suggests the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 7 depends on Claim 6 which recites a motor comprising "a rotor assembly... a bearing...a washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers, said washer positioned on said rotor shaft and in contact with said bearing, said washer configured to dampen vibrations induced when said rotor shaft contacts said bearing during rotation of said rotor shaft."

Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, none of Blaettner et al., Yuji or Hoyer-Ellefsen considered alone or in combination, describe a motor including a washer wherein the washer includes a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft and in contact with the bearing, the washer is configured to dampen vibrations induced when the rotor shaft contacts the bearing during rotation of the rotor shaft. Rather, in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, Yuji

describes using a multi-layered washer to electrically insulate a bolt from the housing, and Hoyer-Ellefsen describes using a washer to secure a rotor assembly in position.

None of Blaettner et al., Yuji, or Hoyer-Ellefsen considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Accordingly, for at least the reasons set forth above, Claim 6 is submitted to be patentable over Blaettner et al. in view of Yuji and further in view of Hoyer-Ellefsen.

Claim 7 depends from independent Claim 6. When the recitations of Claim 7 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claim 7 likewise is patentable over Blaettner et al. in view of Yuji, and in further view of Hoyer-Ellefsen.

Claim 14 recites "a washer assembly for a motor, the motor including an end cap and a rotor shaft including a bearing thereon, said washer assembly configured to reduce vibrational stresses induced from the rotor shaft when the rotor shaft contacts said bearing during rotation of the rotor shaft, said washer assembly comprising: a damping washer in contact with said bearing comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers...a snap ring adjacent said damping washer."

None of Blaettner et al., Yuji, nor Hoyer-Ellefsen, considered alone or in combination, describe or suggest a washer assembly for a motor, the motor including an end cap and a rotor shaft including a bearing thereon, the washer assembly configured to reduce vibrational stresses induced from the rotor shaft when the rotor shaft contacts the bearing during rotation of the rotor shaft, wherein the washer assembly includes a dampening washer in contact with the bearing, the washer includes a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein a snap ring is adjacent to the damping washer. Rather, in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, Yuji describes using a multi-layered washer to electrically insulate a bolt from the housing, and Hoyer-Ellefsen describes using a washer to secure a rotor assembly in position. None of Blaettner et al., Yuji, or

Hoyer-Ellefsen considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Accordingly, for at least the reasons set forth above, Claim 14 is submitted to be patentable over Blaettner et al. in view of Yuji and further in view of Hoyer-Ellefsen.

Claims 15-18 depend, directly or indirectly, from independent Claim 14. When the recitations of Claims 15-18 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-18 are likewise patentable over Blaettner et al. in view of Yuji, and in further view of Hoyer-Ellefsen.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 7 and 14-18 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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PATENT  
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IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicants: Cook et al. :  
Serial Number: 09/750,414 : Group Art Unit: 2834  
Filed: December 28, 2000 : Examiner: Cuevas, Pedro J.  
For: THREE LAYER WASHER :

**SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS**

Hon. Commissioner for Patents  
Washington, D.C. 20231

The following are marked paragraphs and claims in accordance with 37 CFR  
1.121(b)(1)(iii) and 37 CFR 1.211(c)(1)(ii).

IN THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 7 with the following paragraph:

Motors often operate in situations in which the motors are operated intermittently, and in areas in which it is desirable to reduce noise. Motors typically include a rotor mounted within a stator. The rotor includes a shaft rotatably coupled to [a] bearings. The motor also includes a pair of endshields which house the motor, and include an opening sized to receive the rotor shaft therethrough. The rotor shaft extends through the end shield openings which maintain the rotor in place.

IN THE CLAIMS

6. (once amended) A motor comprising:

a motor housing comprising an end cap and a can, said end cap connected to said  
can and comprising an opening, said can comprising an opening;

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a stator assembly positioned within said motor housing and comprising a stator core and a stator bore extending therethrough, said stator core comprising a plurality of stator windings;

a rotor assembly positioned within said stator bore, said rotor assembly comprising a rotor core, a rotor bore disposed through said rotor core, and a rotor shaft extending through said rotor bore, said end cap opening, and said can opening;

a bearing positioned on said rotor shaft adjacent said end cap; and

a washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers, said washer positioned on said rotor shaft [adjacent] and in contact with said bearing, said washer [and] configured to dampen vibrations induced [from] when said rotor shaft contacts said bearing during rotation of said rotor shaft.

14. (once amended) A washer assembly for a motor, the motor including an end cap and a rotor shaft including a bearing thereon, said washer assembly configured to reduce vibrational stresses induced from the rotor shaft when the rotor shaft contacts said bearing during rotation of the rotor shaft, said washer assembly comprising:

a damping washer in contact with said bearing comprising a first layer, a second layer and a third layer; said second layer different from said first and third layers; and

a snap ring adjacent said damping washer.

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